

Sampling for "water quality parameters" (WQP) is necessary for several reasons not the least of which is they will need to be known if a water treatment system is required. Generally WQP are a measure of the overall water quality and used as a cross reference if a contaminant is found at an elevated level. Additionally, they can indicate a problem with the well being contaminated by typical surface contaminants such as agricultural contaminants or normal pathogens. In order for EPA to make a determination that water is safe to drink we must have these basic water quality measurements.

A high level of Total Dissolved Solids (TDS) is an indicator of potential concerns. Most often, high levels of TDS are caused by the presence of potassium, chlorides and sodium or toxic minerals. Generally it can indicate abnormal conditions. The EPA's recommended maximum of TDS in water is 500mg/L (500ppm).

Total Suspended Solids (TSS) is a measure of how much material is carried in the water in a non dissolved manner. It can indicate basic physical disruptions of the aquifer.

Nitrate/Nitrite occurs in the environment from a variety of anthropogenic and natural sources: nitrogen-fixing plants such as alfalfa and other legumes, nitrogen fertilizers, decomposing organic debris, atmospheric deposition from combustion and human and animal waste. The MCL for nitrite is 1 mg/l.

Total coliform bacteria is a commonly used bacterial indicator of the sanitary quality of water and can also indicate the integrity of the well or contamination of the aquifer by improper disposal practices or agricultural activities. Without this measurement it is not possible to determine the safety of drinking water.

Taken in total the WQP give both a general and specific measure of water quality. Without making these measurements it may will not be possible to determine the suitability of the water for potable uses.